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R E M A R K S

Claims 1, 2, 9, 14, 16 and 17 have been amended. Claims 3, 4, 10 and 11 stand as originally filed. Claims 5-8, 12-13 and 15 have been cancelled. Claims 18-21 have been added.

5 : Claims 1-17 were considered in the Office Action.

Claims 1-4 stand rejected under 35 U.S.C. 102(e) as being anticipated by Sun et al., U.S. Patent 6,732,264 (hereinafter referred to as Sun). Claims 1-17 stand rejected under 35 U.S.C. 102(e) as being anticipated by Kang, U.S. Patent 6,434,696.

Support for the amendments and for the new claims is found, for example, in paragraphs 5, 11 and 12 of Applicants' specification, and in the originally filed claims. No new matter has been added.

15 : The Applicants believe that the currently pending claims are not anticipated by or obvious over the cited references for at least the reasons set forth below, and respectfully request reconsideration.

Claim 1

20 : The cited references do not disclose or suggest:

"A method of booting a computer, comprising:
determining whether power to an intrusion monitor was removed before said booting;

25 if said power was removed, configuring a first hardware component from information discovered about said first hardware component;

if said power was not removed, testing for an intrusion into an access panel associated with a first hardware component using said intrusion monitor and configuring said

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first hardware component from a stored profile if an intrusion was not detected."

(Claim 1, as amended, emphasis added)

The above highlighted features are not anticipated by the
5 cited references and would not have been obvious to a person with ordinary skill in the art having the cited references. Sun teaches the use of an electrical hardware latch device to determine whether the case of a computer has been opened since the last boot. If the case was opened, it is assumed that.
10 hardware has been added to or removed from the system, so the BIOS boot code performs a hardware enumeration process - otherwise, a quick initialization is performed. (Sun, col. 3, lines 40-52) However, Sun does not teach or suggest configuring a hardware component from information discovered
15 about the component because power was removed from an intrusion monitor before booting. Rather, Sun implies that the electrical hardware latch device operates even if power is removed. For example, at col. 4, lines 13-20, Sun explicitly teaches that enumeration resource tables must be kept in non-volatile memory for the method to operate properly when the
20 system is booted after power is removed completely. If Sun were to force a full initialization after power is removed completely, as in claim 1 above, the enumeration resource tables would not need to be stored because they would be
25 recreated during the full initialization process. Note that Sun explicitly discusses what is needed for the method to operate properly when the system is booted after power is removed completely (storing enumeration tables in non-volatile memory), but does not disclose how the electrical hardware
30 latch device is able to determine that the case has been opened when no power is available for the latch device, nor to retain that information when no power is available.

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Nevertheless, Sun clearly does not disclose that a full initialization is warranted or needed after power is removed completely from the system. Considering that power is typically removed completely from computer systems when adding or removing hardware from the inside of a computer case (the problem addressed by Sun), the electrical hardware latch device must remain functional even when power is fully removed. Note the language used in Sun, col. 3, lines 41-44, wherein an electrical hardware latch device is used to "indicate whether the case of the computer has been opened since the last boot." Sun's electrical hardware latch device is capable of indicating whether a case has been opened since a last boot. Furthermore, Sun also teaches a flag in nonvolatile memory that indicates that hardware has not been enumerated, forcing hardware enumeration when booting the system the first time after it is manufactured. (Sun, col. 3, line 66 - col. 4, line 8) Clearly, Sun only forces full enumeration one time after the system is manufactured, not every time power is fully removed.

In contrast, Applicants teach a system in which the intrusion monitor is not operational when full power is removed, and so forces detection of information about hardware components during the boot process if power has been removed. (See claim 1 and paragraph 12 of Applicants' specification.)

Sun teaches away from Applicants' claim 1 by teaching the flag to force full enumeration only once after manufacture, and by indicating only that the storage of resource tables in non-volatile memory is needed for the method to operate properly when power is removed completely. Applicants believe that claim 1 is allowable over Sun for at least these reasons, and respectfully request reconsideration.

Kang does not teach or suggest every limitation of currently pending claim 1. Kang teaches testing for changes

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in CONFIG.SYS and AUTOEXEC.BAT files, and reprocessing those files only if they have changed:

5 FIG. 3 is a flowchart of the quick boot process in an IBM personal computer system according to an embodiment of the present invention. The flow proceeds to step S21, in which a POST operation is performed when a computer system is powered on or a reset button is pressed. A normal boot process of an operating system, e.g., Windows95 is then executed (S22). Next, a boot configuration information, i.e., the contents of memory and the status of the attached devices that was created and has been resident in a memory since execution of the POST operation is saved to a disk (S23). A RAM-resident program is called by a software interrupt (INT in general) in modified ROM BIOS codes so as to save the boot configuration information into a disk for future boots. Since then, when a reboot is requested (S24), the POST operation is performed and then the saved boot configuration information is retrieved from the disk in order to complete the reboot process (S25). If it is determined that either CONFIG.SYS or AUTOEXEC.BAT was changed (S26), the changed two files are loaded into a memory and are then executed to form a new boot configuration information, which will be saved to the disk again for the subsequent boot. In this way, if CONFIG.SYS and AUTOEXEC.BAT are not changed, they do not need to be loaded and executed when a computer system is booted, resulting in a quick boot.

10 15 20 25

(Kang, col. 3, line 65 - col. 4, line 22, emphasis added)

30 Testing for changes to a file on disk is not equivalent to "testing for an intrusion into an access panel associated with a first hardware component using said intrusion monitor". To anticipate a claim for a patent, a single prior source must contain all its essential elements. Hybritech, Inc. v.

35 Monoclonal Antibodies, Inc., 231 USPQ 81, 90 (Fed. Cir. 1986).

The Applicants believe that claim 1 is allowable over the cited references and respectfully request reconsideration.

Claim 2 is believed allowable as depending from an allowable base claim and is further believed allowable in that

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the cited references do not disclose or suggest:

"The method of claim 1, further comprising:

if said power was not removed, constructing a profile for
said first hardware component if an intrusion was detected and
storing said profile for said first hardware component."

(Claim 2, as amended, emphasis added)

The cited references do not disclose constructing a
profile for a hardware component only if power to an intrusion
monitor was not removed before booting.

Dependent claims 3 and 4 depend ultimately upon
independent claim 1 which is allowable over the cited art as
discussed above. These dependent claims are likewise in
condition for allowance at least because they depend on an
allowable independent claim. However, dependent claims 3 and
4 are independently allowable at least in that they recite
particular features which, when combined with the elements of
the independent claim, are not disclosed or suggested in the
cited references.

Claim 9

The cited references do not disclose or suggest:

"A computer system, comprising:

a chassis intrusion detection system;

a main power supply;

a standby power supply that powers said chassis intrusion
detection system; and,

a state machine that configures a component of said
computer system from a stored profile of said component if
said chassis intrusion detection system indicates that said

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component has not been altered since said computer system was last booted and configures said component from information discovered about said component if said chassis intrusion detection system indicates that said component may have been altered, wherein when said main power supply and said standby power supply have both turned off since said computer system was last booted, said state machine configures said component from said discovered information."

(Claim 9, as amended, emphasis added)

The above highlighted features are not anticipated by the cited references and would not have been obvious to a person with ordinary skill in the art having the cited references. As indicated in the previous response, Applicants respectfully disagree that Kang discloses or suggests a chassis intrusion detection system. Applicants respectfully disagree that indirect detection of chassis intrusion by detecting hardware components inside a chassis during boot is a "chassis intrusion detection system" as claimed in claim 9. Furthermore, as discussed above, Kang tests only for a change to CONFIG.SYS and AUTOEXEC.BAT files, not for changes to a Hardware component or for intrusion into a chassis. The Examiner has emphasized the typical detection of hardware components during a standard boot procedure in various portions of the Office Action mailed September 8, 2004. Note, however, that the typical detection of hardware components during a standard boot procedure does not determine whether configuration of the hardware components is performed from a stored profile or discovered information. Therefore, the typical detection of hardware components during a standard boot procedure cannot disclose or suggest the detection of chassis intrusion as in Applicants' claim 9. In fact, the slow nature of typical detection of hardware components is

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exactly the problem being solved by the claimed invention.

Furthermore, Kang does not disclose or suggest a standby power supply that powers a chassis intrusion detection system.

The Examiner has indicated in paragraph 19 of the Office

5 Action mailed September 8, 2004 that a standby power supply is inherent to a computer system. Applicants respectfully note that a standby power supply is not inherent to a computer system and that a computer system can function perfectly well without a standby power supply, although many computer systems

10 do include a small battery for maintaining a clock and BIOS settings. However, this does not disclose or suggest a

standby power supply that powers a chassis intrusion detection system. Even under the Examiner's interpretation that the

hardware detection process of a normal boot procedure is

15 equivalent to a "chassis intrusion detection system", (an interpretation with which Applicants respectfully but strongly disagree), the small battery for maintaining a clock and BIOS settings does not power the hardware detection process of the normal boot procedure. Again, to anticipate a claim for a

20 patent, a single prior source must contain all its essential elements. Hybritech, Inc. v. Monoclonal Antibodies, Inc.,
supra.

Sun also does not disclose or suggest "a standby power supply that powers said chassis intrusion detection system",

25 nor that a state machine configures a component from discovered information if both main power and standby power were turned off since the computer system was last booted. As discussed above with respect to claim 1, Sun only forces full enumeration one time after the system is manufactured, not every time power is fully removed. The Applicants believe

30 that claim 9 is allowable over the cited references for at least these reasons and respectfully request reconsideration.

Claim 10 is believed allowable as depending from an

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allowable base claim and is further believed allowable in that the cited references do not disclose or suggest:

5 "The computer system of claim 9 wherein said chassis intrusion detection system comprises a service processor."

(Claim 10, emphasis added)

Kang does disclose a microcomputer (MICOM) for controlling peripheral devices. (Kang, col. 1, lines 20-23)

10 However, Kang's microcomputer does not function as a chassis intrusion detection system. As discussed above, Applicants respectfully disagree that indirect detection of chassis intrusion by detecting hardware components is equivalent to a chassis intrusion detection system as in claims 9 and 10.

15 Furthermore, Kang does not disclose that the MICOM is used to detect hardware changes, but that it controls peripheral devices. Kang's MICOM may or may not in fact detect when peripheral devices are connected or changed, but this information is certainly not taught or suggested in the Kang reference. Again, to anticipate a claim for a patent, a

20 single prior source must contain all its essential elements.

Hybritech, Inc. v. Monoclonal Antibodies, Inc., supra. Kang's MICOM is also not used as the basis for a determination of whether configuration of the hardware components is performed from a stored profile or discovered information, as is

25 Applicants' chassis intrusion detection system.

Sun also does not teach or suggest a chassis intrusion detection system comprising a service processor. Sun teaches that a "CPU 42 is disposed within the case and electrically connected to the latch device to receive a signal from the latch device indicating whether the case has been opened." (Sun, col. 3, lines 57-60) There is no suggestion that this

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CPU 42 is a service processor, rather, it appears that this CPU 42 is the general purpose processor for the computer.

Claim 11 is believed allowable as depending from an allowable base claim and is further believed allowable in that 5 the cited references do not disclose or suggest:

"The computer system of claim 10 wherein said **chassis intrusion detection system comprises switches coupled to said service processor** whereby the state of at least one of said switches indicate when at least one access panel on a chassis of said computer system is open."

(Claim 11, emphasis added)

Again, Kang does not disclose or suggest a chassis intrusion detection system comprising a service processor. Kang also does not disclose or suggest multiple switches indicating when at least one access panel on a chassis is open. In fact, as discussed above, Kang does not even disclose or suggest detecting when an access panel on a chassis is open, particularly using switches. The Examiner's reasoning that typical detection of hardware components during a standard boot procedure indirectly indicates whether chassis intrusion has taken place emphasizes the fact that Kang does not disclose detecting when an access panel on a chassis is open, particularly using switches. If Kang disclosed the use of switches on an access panel on a chassis to indicate when the access panel is open, there would be no need to infer from the presence of new hardware that the chassis had been opened.

It appears that the Examiner has indicated in paragraph 18 of the Office Action mailed September 8, 2004 that it is inherent to a computer system to detect when a peripheral is 30 not connected, and that this is equivalent to using switches to determine when an access panel is open. Applicants

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respectfully disagree. No switches are involved in the typical connecting or disconnecting of peripherals in a computer system, and again, the typical detection of hardware components during a standard boot procedure does not "indicate when at least one access panel on a chassis of said computer system is open". Kang does not disclose or suggest a computer having a chassis with at least one access panel, and therefore, detection of hardware components in Kang's computer system cannot indicate whether an access panel on a chassis is open. Applicants also note that the language of claim 11 indicates that the switches "indicate when at least one access panel on a chassis of said computer system is open", not that a chassis may have been opened in the past to change hardware components.

Sun also does not disclose or suggest a chassis intrusion detection system comprising a service processor, nor multiple switches indicating when at least one access panel on a chassis is open. Sun does disclose an electrical hardware latch device to "indicate whether the case of the computer has been opened since the last boot." (Sun, col. 3, lines 41-44) This does not disclose or suggest switches that indicate when at least one access panel is open. This also does not disclose or suggest the use of multiple switches, nor the use of a service processor as discussed above.

25 Claim 14

The cited references do not disclose or suggest:

"A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for booting a computer, said method steps comprising:

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reading an indicia that indicates whether a change may have been made to a hardware component, wherein said indicia corresponds to whether an access panel has been opened and to whether main and standby power have been turned off;

5 : discovering information about said hardware component if said indicia indicates that a change may have been made to said component or that main and standby power have been turned off, and configuring said hardware component based upon said discovered information; and,

10 : configuring said hardware component based upon stored information if said indicia indicates a change has not been made to said hardware component."

: (Claim 14, as amended, emphasis added)

The above highlighted features are not anticipated by the cited references and would not have been obvious to a person with ordinary skill in the art having the cited references. Again, Kang does not disclose or suggest discovering whether changes have been made to a hardware component and determining as a consequence whether to use stored information or discovered information.

Neither Kang nor Sun disclose or suggest configuring a hardware component based on discovered information because main and standby power have been turned off.

25 : Claim 16 is believed allowable as depending from an allowable base claim and is further believed allowable in that the cited references do not disclose or suggest:

"The program storage medium of claim 14 wherein a service processor that operates on standby power generates said indicia."

30 : (Claim 16, as amended, emphasis added)

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As discussed above, Sun does not disclose or suggest a service processor, nor standby power. Sun also does not disclose or suggest indicia indicating whether main and standby power have been turned off. Although Kang does 5 disclose a microcomputer, it does not operate on standby power and does not generate the indicia of claim 14, as discussed above.

Claim 17 is believed allowable as depending from an allowable base claim and is further believed allowable in that 10 the cited references do not disclose or suggest:

"The program storage medium of claim 14 **wherein a main processor communicates with said service processor to read said indicia.**"

(Claim 17, as amended, emphasis added)

As discussed above, Sun does not disclose or suggest a service processor, let alone a service processor communicating with a main processor to provide the indicia of claim 14. Although Kang does disclose a microcomputer, it does not disclose a main processor communicating with the service 20 processor to read the indicia of claim 14.

Claim 18

The cited references do not disclose or suggest:

"A method of booting a computer, comprising:
determining whether a first access panel and a second
25 access panel have been opened since a last boot process;
discovering information about at least one first hardware
component that is accessed via said first access panel if said

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first access panel was opened since said last boot process;
discovering information about at least one second
hardware component that is accessed via said second access
panel if said second access panel was opened since said last
boot process;

reading said information about said at least one first
hardware component from a first stored profile if said first
access panel was not opened since said last boot process;

reading said information about said at least one second
hardware component from a second stored profile if said second
access panel was not opened since said last boot process;

configuring said at least one first hardware component
based on said information about said at least one first
hardware component; and

configuring said at least one second hardware component
based on said information about said at least one second
hardware component."

(Claim 18, emphasis added)

The above highlighted features are not anticipated by the
cited references and would not have been obvious to a person
with ordinary skill in the art having the cited references.
Again, Kang does not disclose or suggest determining whether
to configure a hardware component using a stored profile or
discovered information based on whether an access panel was
opened since a last boot process.

Sun does not disclose multiple access panels in which
hardware components are associated with particular access
panels.

Dependent claim 19 depends upon independent claim 18
which is allowable over the cited art as discussed above.
This dependent claim is likewise in condition for allowance at

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least because it depends on an allowable independent claim. However, dependent claim 19 is independently allowable at least in that it recites particular features which, when combined with the elements of the independent claim, are not disclosed or suggested in the cited references.

5 Claim 20 is believed allowable as depending from an allowable base claim and is further believed allowable in that the cited references do not disclose or suggest:

10 "The method of claim 18, further comprising updating said second stored profile with said information discovered about said at least one second hardware component if said second access panel was opened since said last boot process."

(Claim 20, emphasis added)

15 Kang does not disclose or suggest updating a stored profile if an access panel was opened since a last boot process.

20 Sun does not disclose multiple access panels, and therefore does not disclose or suggest updating a stored profile about a second hardware component if a second access panel was opened since a last boot process.

Claim 21 is believed allowable as depending from an allowable base claim and is further believed allowable in that the cited references do not disclose or suggest:

25 "The method of claim 18, further comprising determining if power was removed from an intrusion monitor for said first and second access panels since said last boot process, and if so, discovering said information about said at least one first and second hardware components,

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configuring said at least one first and second hardware components based on said information, and updating said first and second stored profiles with said information."

(Claim 21, emphasis added)

5 As discussed above, neither Kang nor Sun disclose or suggest determining if power was removed from an intrusion monitor, nor multiple access panels.

10 The Applicants believe that the currently pending claims are allowable over the cited references and respectfully request the timely issuance of a Notice of Allowance.

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Respectfully submitted,
KLAAS, LAW, O'MEARA & MALKIN, P.C.

By:

Guy K. Clinger
Guy K. Clinger, Esq.
Registration No. 42,422
1999 Broadway, Suite 2225
Denver, CO 80202
(303) 298-9888
Fax: (303) 297-2266

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